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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,616	02/21/2002	Toru Kamimura	020179	4516

23850 7590 03/30/2004

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EXAMINER

GRIER, LAURA A

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/049,616

Applicant(s)

KAMIMURA ET AL.

Examiner

Laura A Grier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/21/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5 and 10 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Specification

1. The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery. See 37 CFR 1.75(a). Appropriate correction is required of the following:

Claim 9, line 2, recites, "a first encoding program according to a said first format": Considering the claim language of claim 1, the recited limitation above appears to be a typographical error, wherein the words, "first encoding", should read as "first decoding program", thus for examination purposes the limitation will be reads as "a first decoding program according to a said first format". Claim 9, line 4 recites, "a second decoding program". A first decoding program has not been claimed. There is insufficient antecedent basis for this limitation.

Claim 9, lines 7, 14, and 17, respectively recite, "said first decoding program". There is insufficient antecedent basis for this limitation.

Claim 9, line 15, recites, "a first decoding program corresponding to a second number-of-bit operation": Considering the claim language of claim 10, the recited limitation above appears to be a typographical error, wherein the words, "first decoding program", should read as "second decoding program", thus for examination purposes the limitation will be reads as "said second decoding program corresponding to a second number-of-bit operation".

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 5 and 10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10257364 (Pub. No. US 2003/0055657, herein, US Pub. 0055657) in view of Huang et al., U. S. Patent No. 6119091. Both applications' inventions are drawn to decoding a plurality of encoded audio signals, with the decoding programs stored in memory.

This is a provisional obviousness-type double patenting rejection.

Regarding claim 1, an attachment means for attaching an external memory of claim 1 of US Pub. 0055657, reads on a recording means; an internal memory of claim 1 of US Pub. 0055657, read on a storing means; a determination means of claim 1 of US Pub. 0055657, reads on a determining means; and a transfer means of claim 1 of US Pub. 0055657, reads on a validating means; and a decoding means of claim 1 of

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US Pub. 0055657, reads on a decoding means. However, US Pub. 0055657, fails to specifically disclose an outputting means for outputting the decoded sound signal.

Regarding the outputting, means in a similar field of endeavor, Huang disclose a decoder comprising speakers for audio playback (figure 1, reference 108, col. 3, lines 22-25), which reads on outputting means.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of US Pub. 0055657 by providing speakers for the purpose of providing audio playback of the decoded audio signals as taught by Huang.

Regarding claim 5, an attachment means for attaching an external memory of claim 1 of US Pub. 0055657, reads on a recording means; and a transfer means of claim 1 of US Pub. 0055657, reads on a loading means; and a decoding means of claim 1 of US Pub. 0055657, reads on a decoding means. However, US Pub. 0055657, fails to specifically disclose an outputting means for outputting the decoded sound signal.

Regarding the outputting, means in a similar field of endeavor, Huang disclose a decoder comprising speakers for audio playback (figure 1, reference 108, col. 3, lines 22-25), which reads on outputting means.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of US Pub. 0055657 by providing speakers for the purpose of providing audio playback of the decoded audio signals as taught by Huang.

Regarding claim 10, an attachment means for attaching an external memory of claim 1 of US Pub. 0055657, reads on a recording means; and a transfer means of claim 1 of US Pub. 0055657, reads on a loading means; and a decoding means of claim 1 of US Pub. 0055657, reads on a decoding means. However, US Pub. 0055657, fails to specifically disclose the decoding in respect the number-of-bit operations.

Regarding the decoding in respect the number-of-bit operations, means in a similar field of endeavor, Huang disclose a decoder comprises a formatter and a sync controller indicate that varied decoding processes, among decoding controllers 510 and 512, takes place based upon the bit size of an audio signal (col. 6, lines 39-67 - col. 7, lines 1-2, and col. 8, lines 8-20), which reads decoding means carries out a 1st number-of-bit operation, and a first decoding program corresponding to the first number-of-bit operation and a second decoding program corresponding the second number-of-bit operation.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of US Pub. 0055657 by decoding based upon the number-of-bit operations for the purpose of enabling efficient decoding of the various audio formats, wherein the bit value of an audio format is an essential criteria for decoding as taught by Huang.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1, 5 and 10** are rejected under 35 U.S.C. 102(e) as being anticipated by Huang et al., U. S. Patent No. 6119091.

Regarding **claim 1**, Huang et al. (herein, Huang) discloses a DVD audio decoder having a direct access PCM FIFO. Huang's disclosure teaches the technique of encoding and decoding audio in different formats such as MPEG-2, AC-3; and linear pulse code modulation (LPCM) – col. 4, lines 15-37). Huang's disclosure further comprises a multimedia disc drive (104) of a multimedia system which may receive various readable/writable disks wherein the disk may contain encoded audio data files coupled with a decoder for decoding the encoded audio signal to an audio signal (figures 2-5, and col. 3, lines 5-25), wherein it is inherent that decoding programs are stored therein for a decoding the a first encoded format and a second encoded format, as evident by the fact that the decoding of the different audio formats takes place based upon an algorithms (col. 8, lines 21-25 and 60-67, col. 9, lines 16-19), which reads on the recording means and storing means; a sync controller (508) determines which decoding controller (510-MPEG/512-AC3) the audio signal/format should be configured with (col. 8, lines 8-20), wherein the format is based upon a formatter (402 – col. 6, lines 39-67 – col. 7, lines 1-2) which read a determining means; wherein the function of microcontroller which is to actuate the decoding process (col. 5, lines 25-28), and the

sync controller, as well, reads on the validating means, an audio decoder (figures 3-5, reference 316), which reads on decoding means; and speakers (108) for audio playback (col. 3, lines 22-25), which reads on outputting means.

Regarding **claim 5**, Huang discloses a DVD audio decoder having a direct access PCM FIFO. Huang's disclosure teaches the technique of encoding and decoding audio in different formats such as MPEG-2, AC-3; and linear pulse code modulation (LPCM) – col. 4, lines 15-37). Huang's disclosure further comprises a multimedia disc drive (104) of a multimedia system which may receive various readable/writable disks wherein the disk may contain encoded audio data files coupled with a decoder for decoding the encoded audio signal to an audio signal (figures 2-5, and col. 3, lines 5-25), wherein it is inherent that decoding programs are stored therein for a decoding the a first encoded format and a second encoded format, as evident by the fact that the decoding of the different audio formats takes place based upon an algorithms (col. 8, lines 21-25 and 60-67, col. 9, lines 16-19), which reads on the recording means and storing means; the function of microcontroller which is to actuate the decoding process (col. 5, lines 25-28) coupled to the DSP (210, col. 4, lines 47-50), reads on the loading means, an audio decoder (figures 3-5, reference 316), which reads on decoding means; and speakers (108) for audio playback (col. 3, lines 22-25), which reads on outputting means.

Regarding **claim 10**, Huang discloses a DVD audio decoder having a direct access PCM FIFO. Huang's disclosure teaches the technique of encoding and decoding audio in different formats such as MPEG-2, AC-3; and linear pulse code modulation (LPCM) – col. 4, lines 15-37). Huang's disclosure further comprises a multimedia disc drive (104) of a multimedia system which may receive various readable/writable disks wherein the disk may contain encoded audio data files coupled with a decoder for decoding the encoded audio signal to an audio signal (figures 2-5, and col. 3, lines 5-25), wherein it is inherent that decoding programs are stored therein for a decoding the a first encoded format and a second encoded format, as evident by the fact that the decoding of the different audio formats takes place based upon an algorithms (col. 8, lines 21-25 and 60-67, col. 9, lines 16-19), which reads on an attaching means for detaching a record medium, the function of microcontroller (230) which is to actuate the decoding process (col. 5, lines 25-28) coupled to the DSP (210, col. 4, lines 47-50), reads on the loading means (and loading first decoding program), an audio decoder (figures 3-5, reference 316), which reads on decoding means; and speakers (108) for audio playback (col. 3, lines 22-25), which reads on outputting means; the functions of the formatter and the sync controller indicate that varied decoding processes, among decoding controllers 510 and 512, takes place based upon the bit size of an audio signal (col. 6, lines 39-67 - col. 7, lines 1-2, and col. 8, lines 8-20), which reads decoding means carries out a 1st number-of-bit operation, and decoding including a 1st and 2nd decoding programs as inherently taught as evidence by

decoding algorithms and look-up tables (col. 8, lines 64-67) corresponding to a first number-of-bit operation and a second number-of-bit operation.

Allowable Subject Matter

Claim 9 is objected in view of 35 CFR 1.75(a) specification object, but would be allowable if rewritten to overcome the lack of antecedent basis and indefiniteness stated above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

LAG
March 22, 2004

Laura A. Dyer